Spiral Vibration Damper

**NOMENCLATURE**

**Length:** Assists in identification of conductor size, corresponding to tabular information appearing on following page.

**Damping Section:** Helically scaled for interplay of damper and conductor, to provide the action/reaction motion that opposes the natural vibration wave.

**Gripping Section:** Has a smaller helix designed to the grip conductor.

**GENERAL RECOMMENDATIONS**

Damping devices are designed for the single purpose of reducing vibration. This single function is entirely different from that of protecting against (1) stress concentrations, (2) fretting or abrasion, and (3) arc-over burning. Because of this, damping devices should be considered only as supplemental to WRAPLOCK® Tie, Armor Rod, Side Tie, Spool Tie, or other hardware at tangent supports. Dampers are also used as supplemental protection at Dead-ends.

The degree of protection needed on a specific line depends upon a number of factors such as line design, temperature, tension, exposure to wind flow, and vibration history on similar construction in the same area.

Spiral Vibration Dampers are also effective on certain size overhead shield wires and OPGW. Consult PLP® for specifics.

For damper applications on ADSS cable, refer to the FIBERLIGN® Fiber Optic Products catalog under motion control.

Consult your PREFORMED™ Sales Representative for placement and installation guidelines.

**MATERIAL.** The solid polyvinyl chloride helical rod material is noncorrosive and has a surface hardness which does not abrade the conductor.

**APPLICATION-INSPECTION.** The Gripping Section should be installed approximately one hand’s width from the ends of Armor Rod or other hardware. It is not necessary to make engineering calculations as to placement.

Usage Recommendations for Spiral Vibration Dampers on Bare Conductor, Shield Wire and OPGW.

**Number of SVDs Per Span**

<table>
<thead>
<tr>
<th>Span Length</th>
<th>0-800'</th>
<th>801'-1600'</th>
<th>1601'-2400'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Hi Mass</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

**Note:** Water/Canyon Crossings – due to the increased potential of laminar wind flow, an additional 50% more dampers per span should be added to the standard recommendations above for adequate protection.

In areas that are prone to high levels of vibration or conductor tension is in excess of 20% RBS, consult Preformed Line Products for specific recommendations.

**SAFETY CONSIDERATIONS**

1. This product may be reused if in good condition.

2. This product is intended for use by trained craftspeople only. This product SHOULD NOT BE USED by anyone who is not familiar with and trained in the use of it.

3. When working in the area of energized lines with this product, EXTRA CARE should be taken to prevent accidental electrical contact.

4. For PROPER PERFORMANCE AND PERSONAL SAFETY be sure to select the proper size PREFORMED Spiral Vibration Damper before application.

5. PREFORMED Spiral Vibration Dampers are precision devices. To insure proper performance, they should be stored in cartons under cover and handled carefully.
Spiral Vibration Damper (Standard)

For use on:
Bare Conductors, Shield Wires and OPGW

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Diameter Range (Inches)</th>
<th>Units</th>
<th>WT/Lbs.</th>
<th>Length (Inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5050102</td>
<td>.174 - .249</td>
<td>50</td>
<td>29</td>
<td>46</td>
</tr>
<tr>
<td>5050103</td>
<td>.250 - .326</td>
<td>50</td>
<td>31</td>
<td>49</td>
</tr>
<tr>
<td>5050104</td>
<td>.327 - .461</td>
<td>50</td>
<td>34</td>
<td>51</td>
</tr>
<tr>
<td>5050105</td>
<td>.462 - .563</td>
<td>50</td>
<td>36</td>
<td>53</td>
</tr>
<tr>
<td>5050106</td>
<td>.564 - .760</td>
<td>25</td>
<td>50</td>
<td>65</td>
</tr>
</tbody>
</table>

EXPLANATORY NOTES:
(1) Up to three SVDs can be subset together in one location where the cable diameter is 0.461" and below.
(2) On the cables with diameters above 0.461", only two SVDs should be subset for optimal damping performance.
Spiral Vibration Damper (Hi Mass)

For use on:
Bare Conductors, Shield Wires and OPGW

CONSTRUCTION

The Hi Mass Spiral Vibration Damper (HMSVD) has a damping section close to double that of the standard SVD. By extending the length of the damping section, one Hi Mass SVD provides the effectiveness of two standard SVDs.

BENEFITS

• Fewer points of installation.
• Fewer components on the line.

<table>
<thead>
<tr>
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<th>Units</th>
<th>WL/Lbs.</th>
<th>Length (Inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5050200</td>
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<tr>
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<td>94</td>
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<tr>
<td>5050203</td>
<td>.564 - .760</td>
<td>15</td>
<td>55</td>
<td>97</td>
</tr>
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